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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,973	10/29/2001	James H. Bennett	7190-D20	3960

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12/05/2002

BASF CORPORATION
PATENT DEPARTMENT
1609 BIDDLE AVENUE
WYANDOTTE, MI 48192

EXAMINER

DICUS, TAMRA

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 12/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,973

Applicant(s)

JAMES H. BENNETT ET AL.

Examiner

Tamra L. Dicus

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-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 20-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 20 recites “a compressive force”. One with skill in the art would not know how to perform such a force (e.g. Pressure via a die, a human hand., etc.)

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 20, rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 20: “sheet-like molded” is included in the preamble. The term “sheet-like” is an indefinite term, and is unclear. The Examiner suggests renaming the preamble to say, “A thermoplastic sheet”. Also the term “sufficient amount” appears in lines 3 and 6. This limitation is a relative term, which renders the claim indefinite. The term “sufficient” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention.

3. Claims 25 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. The term “plurality” is a relative term, thereby rendering the claim indefinite.

Claim Objections

1. In claim 20, “said treated surface” lacks antecedent basis. The Examiner suggests amending to “said surface” as in line 2 to keep consistency.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,407,988 to Kogowski.

Kogowski teaches granite-looking ASA copolymers (prepared by polymerizing acrylonitrile, styrene, and an acrylate such as acrylic acid, PMMA, where copolymer blends contain polymers from 1 to 50 weight percent acrylonitrile, styrene, and acrylate) are well known thermoplastics and may be molded with colorants of orange, green, and black (plurality of particles) through an extruder having 3 zones to produce a plaque (sheet-like molded thermoplastic product), also other polymers suitable for blending include polyesters PET and PBT. Extruders inherently produce a compressive force. That the surface has been exposed to a compressive force sufficient to promote adherence of color-containing resin system to the

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surface is inherent since the product is produced by an extruder, which adheres resins with or without color. A plaque inherently has at least one visible surface, see also col. 1, lines 18-30, that include such material used to make products such as bathtubs, shower stalls, and spas. See further col. 2, lines 5-65 col. 3, lines 1-20 and patented claims 1-33. That the thermoplastic is first extruded is a process limitation in a product claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps.

Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited process steps which must be established. *In re Brown*, 459 F. 2d 531.

6. Claims 20, and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5059,471 to McNally et al.

McNally teaches a tile product composed of thermoplastic material such as polypropylene or polybutylene, or other polymeric resins that further comprise colorants of various colors of red, green, blue, white, and black and particles having a U.S. mesh size between 60 and 200, meeting the Applicant's range from -10 to +5000. Refer to col. 2, lines 5-45. Such tile creates a unique appearance (visual affect). That the thermoplastic is first extruded is a process limitation in a product claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT

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of the recited process steps which must be established. *In re Brown*, 459 F. 2d 531. McNally teaches a first layer of thermoplastic vinyl polymer, polypropylene or polybutylene as the tile base and applies a second layer of plurality of particles or chips that may be included from 77 to 100 weight percent and are formed in a resin such as an acrylic or ABS material with a compressive force such as a direct roll coater. See col. 1, lines 43-66.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 22-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,407,988 to Kogowski in view of USPN 6,136,441 to MacGregor et al., USPN 5,059,471 to McNally et al., and USPN 5,496,630 to Hawrylko et al.

Kogowski does not explicitly disclose a first layer adhered to a second layer structure of claim 27. However, McNally teaches a first layer of thermoplastic vinyl polymer, polypropylene or polybutylene as the tile base and applies a second layer of plurality of particles or chips that adhere to the first layer and may be included from 77 to 100 weight percent and are formed in a resin such as an acrylic or ABS material with a compressive force such as a direct roll coater. See col. 1, lines 43-66. Hence it would have been obvious to one of ordinary skill in the art to modify the thermoplastic grante-looking product to define such a product with color and resin in a layer adhered to a thermoplastic layer since Kogowski teaches the product extruded and

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McNally teaches producing these two compatible layers adhering to each other to make a decorative tile.

9. Kogowski does not expressively disclose the mesh size of the particles in the color-containing system of claims 26 and 33. However, McNally discloses color particles or chips may be included from 77 to 100 weight percent and are formed in a resin such as an acrylic or ABS material, have a U.S. mesh size between 60 and 200, meeting the Applicant's range from – 10 to +5000. Refer to col. 2, lines 24-45. Hence it would have been obvious to one of ordinary skill in the art to modify the colorant particles and polymer blend of Kogowski to further include colorant particles having a U.S. mesh size as claimed since McNally teaches it is suitable for ABS/acrylic materials and may contain a single or various colors of red, green, blue, white, and black pigmented resins for use in a thermoplastic produced tile and by using various particle size creates an illusion depth appearance at col. 2, lines 25-68, col. 1, lines 43-68, col. 4, lines 1-10, col. 5, lines 44-56, and Example 2.

Kogowski does not explicitly disclose polycarbonate blended with ABS or ASA or the blend ratios of claims 24, 29, and 31. Further regarding claim 22 and addressing claims 24, 29, and 31, MacGregor teaches blends of polycarbonate and polyester from 50:50 to 90:10 at col. 6, lines 55-62 and an ABS/PC blend containing 15 to 85 weight % PC and 15 to 85 weight percent ABS resins at col. 8, lines 39-46 (including claims 28 and 30). MacGregor teaches such polymeric blends may be layered and further include decorative color interlayers. See also col. 9, lines 6-10, col. 10, lines 1-15, col. 10, lines 5-59 teaching blends of PET, PBN, PPT, MBS, ABS, polyphenylene ether and polystyrene resins. Hence it would have been obvious to one of ordinary skill in the art to further include blends of ABS or ASA with PC, PET, PBN, PPT,

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MBS, ABS, polystyrene since MacGregor teaches the very compatibility of these specific polymers.

Further addressing claims 23, 30, and 32 to thermoplastic binders. Hawrylko teaches a thermoplastic multilayer product disclosing it is known to blend color mica (colored particles) dispersed in liquid polymer binders such as urethanes, vinyl, acrylics, and styrene resins that are coextruded to be laminated over a substrate at col. 1, lines 55-68. Therefore it would have been obvious to one of ordinary skill in the art to modify the thermoplastic product of Kogowski to further include the aforementioned binders since Hawrylko provides color particles with resins to produce a colorful coating for a multilayered thermoplastic product at col. 1, lines 50-66.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

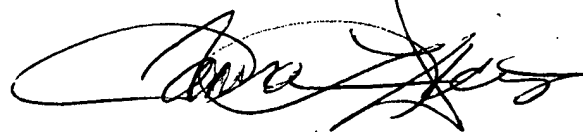
- USPN 4,717,620 to Bowen et al. teaches polymeric styrene and polyester beads with colored particles.
- USPN 5,891,948 to Kano teaches using colors to make a granite look.
- USPN 5,202,180 to Watts teaches a decorative web using colorful, chromatic, iridescent and metallic pigments in resins to make a visual effect.
- USPN 5,994,441 to Anghileri et al. teaches acrylic polymers for molding.
- USPN 5,500,259 to Kubota et al. teaches artificial granite material.
- USPN 5,476,895 to Ghahary teaches a granite-like coating for plastic articles.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tamra L. Dicus
Examiner
Art Unit 1774

November 26, 2002

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